From: Flowers, Lynn [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1A4411C874D041B9A8BADFC32B91BD70-FLOWERS, LYNN]

Sent: 11/20/2014 3:55:59 PM

To: Olden, Kenneth [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=8979224c77ea4d559f70cab1688f28aa-Olden, Kenneth]; Walsh, Debra

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=d4fd965338fc4d449c2954945c41de46-Walsh, Debra]; Vandenberg, John

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=dcae2b98a04540fb8d099f9d4dead690-Vandenberg, John]; D'Amico, Louis

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=78a91f83c4414910be286efe02004dbc-D'Amico, Louis J.]; Bussard, David

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=cf26b876393e44f38bdd06db02dbbfe5-Bussard, David]; Sonawane, Bob

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=a30dc04805854452837bcabc6b2954ab-Sonawane, Bob]; Makris, Susan

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=7654051d8d1240a39dfa9463c9b0b7e5-Makris, Susan]; Cogliano, Vincent

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=51f2736376ac4d32bad2fe7cfef2886b-Cogliano, Vincent]; Perovich, Gina

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=6e3c19d7f4db41bfa2477aa27ad83945-Perovich, Gina]; Strong, Jamie

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=ea753aafefb74c268550fe6a2c187838-Benedict, Jamie]; Murray, Ed

(ATSDR/DTHHS/OD) [hem0@cdc.gov]; foster2@niehs.nih.gov; Todd, Glenn D. (Dan) (ATSDR/DTHHS/ETB)

[gdt1@cdc.gov]; Raffaele, Kathleen [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=cc48281bbab34bf5bf3ab1a63780d5ca-Kathleen Raffaele]; Morris, Jeff

[/o=ExchangeLabs/ou=Exchange Administrative Group

 $(FYDIBOHF23SPDLT)/cn=Recipients/cn=55c34872e6ea40cab78be910aec63321-Morris,\ Jeff];\ Barone,\ Standard FYDIBOHF23SPDLT)/cn=Recipients/cn=55c34872e6ea40cab78be910aec63321-Morris,\ Jeff]$

[/o=ExchangeLabs/ou=Exchange Administrative Group

 $(FYDIBOHF23SPDLT)/cn=Recipients/cn=a4f8618acbba418da24c110f3123a2af-Barone,\ Stan];\ Abadin,\ Henry$

(ATSDR/DTHHS/ETB) [hga0@cdc.gov]; Foster, Stiven [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=43d242767f304355ad415ec856988213-sfoste02]

Subject: addnl information: TCE Rat Cardiac Malformations w/W. Caffey Norman (HSIA) & others

Hello everyone: As an update to Nov 3, 2014 meeting with the HSIA folks, Caffey Norman sent the email below to Ken Olden, Linda Birnbaum and Ed Murray last week.

We talked here in NCEA about getting back together with you all and I was just about to set something up as a de-brief from that meeting when I saw the email below.

At least the tenor of the email is that they may be entertaining moving away from a "definitive" cardiac defect study.

Deliberative Process / Ex. 5

By the way, we just got an inquiry from CalEPA regarding the status of the HSIA proposal from 2013 that they have a copy of. The word is out...

Thanks! Lynn

From: Norman, Caffey [mailto:caffey.norman@squirepb.com]

Sent: Friday, November 14, 2014 4:03 PM **To:** Olden, Kenneth; Meadows, Leslie

Cc: 'birnbaumls@niehs.nih.gov'; Murray, Ed (ATSDR/DTHHS/OD) (hem0@cdc.gov)

Subject: TCE Case Study

Dear Dr. Olden,

Thank you for arranging and participating in the November 3 meeting with HSIA representatives to discuss our proposal for a developmental study of TCE focused on the cardiac abnormality endpoint. We understand from this meeting that a broader science approach is desired, and are developing a concept document for data collection that would contribute to the understanding of gestational pharmacokinetics and windows of sensitivity by using dosimetry to allow for bridging across existing inhalation, gavage, and drinking water data. Such a TCE dataset would serve as a case study to compare internal levels of TCE/TCA in maternal and fetal compartments, and thus provide information more generally useful in exploring windows of susceptibility.

We plan to circulate the concept document to you and the other participants by December 12, 2014.

With best regards,

W. Caffey Norman Partner Squire Patton Boggs (US) LLP 2550 M Street, NW Washington, DC 20037 T +1 202 457 5270 F +1 202 457 6315

M +1 202 460 9495

Caffey.Norman@squirepb.com | squirepattonboggs.com

Lynn Flowers, PhD, DABT Associate Director for Health National Center for Environmental Assessment **US EPA** Washington, DC 703-347-8537